#### Third Grade Earth/Space Science Grade Standards, Supporting Skills, and Examples

Indicator 1: Analyze the various structures and processes of the Earth system.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Knowledge)	3.E.1.1. Students are able to define the difference between a rock and a mineral.
	<b>Example:</b> Minerals look the same throughout while you can see different minerals within a rock.
	✓ Examine fossils and describe how they are formed.
	3.E.1.2. Describe how humans use Earth's natural resources.
(Comprehension)	Example: using minerals for jewelry or trees for paper
	Define natural resources.

Indicator 2: Analyze essential principles and ideas about the composition and structure of the universe.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Knowledge)	3.E.2.1. Students are able to identify the Earth as one of the planets that orbits the Sun.
	All planets orbit the Sun.
(Analysis)	3.E.2.2. Students are able to recognize changes in the appearance of the Moon over time.
	<ul> <li>Know that the Moon does not change shape, but at different times appears to change shape.</li> </ul>
	✓ Explain the relationship between the rotation of the Earth on its axis and the day/night cycle.
	Describe the causes for Earth's seasons.

## Third Grade Earth/Space Science Performance Descriptors

Advanced	Third grade students performing at the advanced level:
	<ul> <li>compare and contrast rocks and minerals;</li> </ul>
	<ul> <li>create a visual representation of the Sun and planets.</li> </ul>
	Third grade students performing at the proficient level:
	<ul> <li>group rocks and minerals;</li> </ul>
Proficient	<ul> <li>describe Earth's natural resources and their products;</li> </ul>
	<ul> <li>identify the Sun, Earth, and Moon as a system;</li> </ul>
	<ul> <li>describe the change in appearance of the Moon over</li> </ul>
	time.
Basic	Third grade students performing at the basic level:
	<ul> <li>locate the Sun and the Earth;</li> </ul>
	<ul> <li>recognize natural resources.</li> </ul>

# Third Grade Earth/Space Science ELL Performance Descriptors

	Third grade ELL students performing at the proficient level:
Proficient	• locate the Sun and the Earth;
	<ul> <li>recognize natural resources;</li> </ul>
	<ul> <li>ask questions related to science topics.</li> </ul>
	Third grade ELL students performing at the intermediate
	level:
Intermediate	• identify the planet where they live;
	• name two natural resources;
	• give simple oral responses to questions on topics
	presented in class.
	Third grade ELL students performing at the basic level:
	• locate the Sun;
	<ul> <li>know what a natural resource is;</li> </ul>
Basic	<ul> <li>participate in science activities and experiments with</li> </ul>
Dasic	other students;
	<ul> <li>use correct pronunciation of science words;</li> </ul>
	<ul> <li>respond correctly to yes or no questions on topics</li> </ul>
	presented in class.
	Third grade ELL students performing at the emergent level:
Emergent	<ul> <li>use correct pronunciation of science words;</li> </ul>
	• use non-verbal communication to express scientific ideas.
	Third grade ELL students performing at the pre-emergent
	level:
_	observe and model appropriate cultural and learning
Pre-emergent	behaviors from peers and adults;
	<ul> <li>listen to and observe comprehensible instruction and</li> </ul>
	communicate understanding non-verbally.
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### Fourth Grade Earth/Space Science Grade Standards, Supporting Skills, and Examples

Indicator 1: Analyze the various structures and processes of the Earth system.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Comprehension)	4.E.1.1. Students are able to describe the basic stages of the water cycle.
	Example: model of water cycle
	Define evaporation, condensation, and precipitation.
(Comprehension)	<ul> <li>4.E.1.2. Students are able to describe how weather conditions and phenomena occur and can be predicted.</li> <li>Identify the positive and negative impacts of weather on the environment.</li> </ul>
	Example: flooding vs adequate rainfall  ✓ Explain the use of weather instruments.  Examples: rain gauge, weather vane, thermometer, and barometer  ✓ Identify the Earth's atmosphere, biosphere, lithosphere, and hydrosphere.

Indicator 2: Analyze essential principles and ideas about the composition and structure of the universe.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
	4.E.2.1. Students are able to describe the motions of Earth, Sun, and Moon.
	Revolution and rotation
(Comprehension)	✓ Use terminology to describe the phases of the Moon.
	Examples: waning moon or waxing moon
	✓ Describe relative size and position of moons, planets, and stars.
	✓ Identify the characteristics of the planets.
	Examples: appearance, size, distance from the Sun

# Fourth Grade Earth/Space Science Performance Descriptors

	Fourth grade students performing at the advanced level:
	<ul> <li>demonstrate the water cycle;</li> </ul>
Advanced	<ul> <li>interpret a weather map;</li> </ul>
	<ul> <li>describe the relationship between the tilt of the Earth and</li> </ul>
	seasons.
	Fourth grade students performing at the proficient level:
	<ul> <li>explain the basic water cycle;</li> </ul>
Proficient	<ul> <li>identify negative and positive effects of weather conditions;</li> </ul>
	<ul> <li>describe the relationship between rotation and revolution of the Earth.</li> </ul>
	Fourth grade students performing at the basic level:
Basic	<ul> <li>recognize the basic water cycle;</li> </ul>
	<ul> <li>describe the weather today;</li> </ul>
	<ul> <li>demonstrate rotation using a globe.</li> </ul>

## Fourth Grade Earth/Space Science ELL Performance Descriptor

Fourth grade ELL students performing at the proficient	
	level:
Proficient	<ul> <li>recognize the three components of the basic water cycle (evaporation, condensation, precipitation);</li> </ul>
	<ul> <li>describe the negative efforts of weather;</li> </ul>
	<ul> <li>demonstrate rotation using a globe;</li> </ul>
	<ul> <li>ask questions related to science topics.</li> </ul>
	Fourth grade ELL students performing at the intermediate
	level:
	<ul> <li>label the basic water cycle components;</li> </ul>
Intermediate	<ul> <li>describe the positive effects of weather;</li> </ul>
	<ul> <li>recognize that a globe is a model for the Earth;</li> </ul>
	<ul> <li>give simple oral responses to questions on topics</li> </ul>
	presented in class.
	Fourth grade ELL students performing at the basic level:
	<ul> <li>recognize that water is reused;</li> </ul>
	<ul> <li>describe the weather today;</li> </ul>
	<ul> <li>recognize a globe;</li> </ul>
Basic	<ul> <li>participate in science activities and experiments with</li> </ul>
	other students;
	<ul> <li>use correct pronunciation of science words;</li> </ul>
	<ul> <li>respond correctly to yes or no questions on topics</li> </ul>
	presented in class.

	Fourth grade ELL students performing at the emergent level:
Emergent	<ul> <li>use correct pronunciation of science words;</li> </ul>
	• use non-verbal communication to express scientific ideas.
	Fourth grade ELL students performing at the pre-emergent
	level:
Dro omongont	<ul> <li>observe and model appropriate cultural and learning</li> </ul>
Pre-emergent	behaviors from peers and adults;
	<ul> <li>listen to and observe comprehensible instruction and</li> </ul>
	communicate understanding non-verbally.

#### Fifth Grade Earth/Space Science Grade Standards, Supporting Skills, and Examples

Indicator 1: Analyze the various structures and processes of the Earth system.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
	5.E.1.1. Students are able to describe the basic structure of Earth's interior.
	<ul> <li>Define crust, mantle, and core.</li> </ul>
	✓ Explain the formation of geological features of the Earth through plate tectonics.
(Comprehension)	Examples: volcanoes, faults, ocean trenches
	✓ Describe how Earth's surface is constantly changing.
	Examples: earthquakes, volcanoes, weathering, erosion, and deposition
	✓ Examine topographical maps.

Indicator 2: Analyze essential principles and ideas about the composition and structure of the universe.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
	5.E.2.1. Students are able to describe the components (Sun, planets, and moons) of the solar system.
	Relative size
(Comprehension)	Order and relative distance from the Sun and each other
	✓ Describe the relative scale of the Earth to the Sun, planets, and the Moon.
	5.E.2.2. Students are able to explain how the Earth's rotation affects the appearance of the sky.
(Comprehension)	<ul> <li>Constellations appear to move as a result of Earth's rotation.</li> </ul>
	Example: The Big Dipper appears in different locations throughout the night.
	<ul> <li>Apparent brightness of a star depends in part upon its distance from the Earth.</li> </ul>
	Example: A flashlight beam appears brighter as it moves closer.

## Fifth Grade Earth/Space Science Performance Descriptors

	Fifth grade students performing at the advanced level:
Advanced	<ul> <li>list the characteristics of the Earth's interior;</li> </ul>
	<ul> <li>compare and contrast the components of the solar system.</li> </ul>
	Fifth grade students performing at the proficient level:
	<ul> <li>describe the layers of the Earth's interior;</li> </ul>
Proficient	<ul> <li>describe the components (Sun, planets, and moons) of the solar system;</li> </ul>
	<ul> <li>explain how the Earth's rotation affects the appearance of the sky.</li> </ul>
	Fifth grade students performing at the basic level:
Basic	<ul> <li>recognize the layers of the Earth;</li> </ul>
	• identify the nine planets in our solar system.

# Fifth Grade Earth/Space Science ELL Performance Descriptors

ELL Performance Descriptors						
	Fifth grade ELL students performing at the proficient level:					
Proficient	<ul> <li>recognize the layers of the Earth;</li> </ul>					
	<ul> <li>identify the nine planets in the solar system;</li> </ul>					
	<ul> <li>ask questions related to science topics.</li> </ul>					
	Fifth grade ELL students performing at the intermediate					
Intermediate	level:					
	<ul> <li>label a diagram of the layers of the Earth;</li> </ul>					
	• identify five of the nine planets in the solar system;					
	<ul> <li>give simple oral responses to questions on topics</li> </ul>					
	presented in class.					
Basic	Fifth grade ELL students performing at the basic level:					
	<ul> <li>recognize that the Earth has layers;</li> </ul>					
	• identify three of the nine planets in the solar system;					
	<ul> <li>participate in science activities and experiments with</li> </ul>					
	other students;					
	<ul> <li>use correct pronunciation of science words;</li> </ul>					
	<ul> <li>respond correctly to yes or no questions on topics</li> </ul>					
	presented in class.					
	Fifth grade ELL students performing at the emergent level:					
Emergent	<ul> <li>use correct pronunciation of science words;</li> </ul>					
	<ul> <li>use non-verbal communication to express scientific ideas.</li> </ul>					
Pre-emergent	Fifth grade ELL students performing at the pre-emergent					
	level:					
	observe and model appropriate cultural and learning					
	behaviors from peers and adults;					
	listen to and observe comprehensible instruction and					
	communicate understanding non-verbally.					